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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,366

01/16/2007

Philip Corbin III

FLUX - 2006

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EXAMINER

LE, DANG D

ART UNIT

PAPER NUMBER

2834

MAIL DATE

DELIVERY MODE

01/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,366	Applicant(s) CORBIN ET AL.	
	Examiner Dang D. Le	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 51, 52 and 124 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-48 and 50 is/are rejected.
- 7) ☒ Claim(s) 34 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 25-50 in the reply filed on 1/4/10 is acknowledged.

Specification

2. The abstract of the disclosure is objected to because it is not on a separate page. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 32 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 depends on claim 25 and claim 45 depends on claim 38. Claims 32 and 45 recite that "the primary rotary member's magnets axial position is adjusted by an automatic device" while claims 25 and 38 requires that "said primary rotary member's axial position relative to said secondary rotating member is fixed".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 25, 32, 33, 38, 45, 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood (2,437,371) in view of Six (6,762,524).

Regarding claim 25, Wood shows an apparatus for transferring torque magnetically comprising: a primary torque driving rotary member (1) and a secondary driven rotary member (3); the primary rotary member axially overlapping said secondary rotary member (Fig. 1); the secondary rotary member being surrounded by said primary member Fig. 1); the primary rotary member having permanent magnets (17) mounted on it; the secondary rotary member having permanent magnets; said secondary rotary member axially overlapped by said primary rotating member wherein said primary rotary member's axial position relative to said secondary rotating member is fixed (Fig. 1); and said primary rotating member being connected to and driven by a torque producing device and said secondary rotating member being connected to a torque utilizing device whereby rotation of the primary rotary member causes rotation of said secondary

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rotating member by some or all of the magnetic flux lines emanating from said permanent magnets mounted on said primary rotating member cutting through the magnets (18) on said secondary rotary member thereby generating torque and rotation in said secondary rotary member in relation to the percentage of the total area that said secondary rotary member is axially overlapped by said primary rotary member.

Wood does not show the secondary rotary member having electroconductive elements and magnetically permeable materials and the magnetic flux lines emanating from said permanent magnets mounted on said primary rotating member cutting through the electroconductive material.

Six shows the secondary rotary member (274) having electroconductive elements and magnetically permeable materials (copper) and the magnetic flux lines emanating from said permanent magnets (264) mounted on said primary rotating member cutting through the electroconductive material for the purpose of improving power capacity.

Since Wood and Six are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the secondary rotary member with electroconductive elements and magnetically permeable materials and the magnetic flux lines emanating from said permanent magnets mounted on said primary rotating member cutting through the electroconductive material as taught by Six for the purpose discussed above.

Regarding claims 33 and 48, Six also shows the secondary rotary member's electroconductive material being made of copper and its alloys.

Regarding claim 38, it is similar to claim 25 except that it recites the primary rotary member having electroconductive elements and magnetically permeable materials and the secondary rotary member having permanent magnets mounted on it. It is noted that Six also teaches the feature in Figures 1 and 17 and column 10, lines 40-50. As a result, claim 38 is rejected.

Regarding claims 32 and 45, Six also shows the primary rotary member's magnets axial position is adjusted by an automatic device (22).

8. Claims 25, 27, 31, 35, 38, 40, 44 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehde (2,807,734) in view of Six (6,762,524).

Regarding claims 25 and 38, Lehde and Six shows all of the limitations of the claimed invention including the secondary rotary member (274, Six) having electroconductive elements and magnetically permeable materials (copper, Six) and the magnetic flux lines emanating from said permanent magnets (264, Six) mounted on said primary rotating member cutting through the electroconductive material for the purpose of improving power capacity.

Regarding claims 27 and 40, Lehde also shows the primary rotary member's magnets being supported by a cylinder made of a ferrous material (13, soft iron).

Regarding claims 31 and 44, Lehde also shows the primary and secondary rotary members being independently supported.

Regarding claim 50, Six also shows the primary rotary member's electroconductive material being configured as a solid cylindrical ring geometry mounted on said primary rotary member's inner cylindrical surface (24 and 18).

Regarding claim 35, Six also shows a solid cylindrical ring geometry mounted on said secondary rotary member's outer cylindrical surface (32 on 30).

Claims 26, 36, 39, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Six and further in view of Cramer (5,763,973).

Regarding claims 26 and 39, the machine of Wood modified by Six includes all of the limitations of the claimed invention except for the primary rotary member's permanent magnets containing rare earth materials.

Cramer shows the primary rotary member's permanent magnets containing rare earth materials for the purpose of increasing output power.

Since Wood, Six, and Cramer are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use rare earth materials as taught by Cramer for the purpose discussed above.

Regarding claims 36 and 46, Cramer also shows neodymium, iron and boron.

9. Claims 28, 30, 40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Six and further in view of Denk et al. (5,292,284).

Regarding claims 28, 30, 40, and 43, the machine of Wood modified by Six includes all of the limitations of the claimed invention except for the primary rotary member's cylinder being constructed of built up thin pieces of ferrous material each electrically separated from one another by a suitable electrical insulating material or the secondary rotary member's electroconductive material being supported by laminated pieces of ferrous material each electrically separated from one another by a suitable electrical insulating material.

Denk et al. shows the primary rotary member's cylinder being constructed of built up thin pieces of ferrous material each electrically separated from one another by a suitable electrical insulating material (14, laminations) for the purpose of reducing eddy current.

Since Wood, Six, and Denk et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the primary rotary member's cylinder (as well as the secondary member) with built up thin pieces of ferrous material each electrically separated from one another by a suitable electrical insulating material as taught by Denk et al. for the purpose discussed above.

10. Claims 29 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Six and further in view of Henderson et al. (6,411,001)

Regarding claims 28 and 40, the machine of Wood modified by Six includes all of the limitations of the claimed invention except for the secondary rotary member's electroconductive material is made of aluminum and its alloys.

Henderson et al. shows the secondary rotary member's electroconductive material is made of aluminum and its alloys for the purpose of reducing eddy current.

Since Wood, Six, and Henderson et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the secondary rotary member's electroconductive material of aluminum and its alloys as taught by Henderson et al. for the purpose discussed above.

11. Claims 37 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Six and further in view of Rounds (6,084,322).

Regarding claims 37 and 47, the machine of Wood modified by Six includes all of the limitations of the claimed invention except for the primary rotary member's permanent magnets containing alnico, iron and ceramic materials.

Rounds shows alnico, iron and ceramic materials for the purpose of increasing output power.

Since Wood, Six, and Rounds are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to the primary rotary member's permanent magnets containing alnico, iron and ceramic materials as taught by Rounds for the purpose discussed above.

Allowable Subject Matter

12. Claims 34 and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: the record of prior art does not show the secondary rotary member's electroconductive material being configured as a closed circumferential ladder geometry mounted on said secondary rotary member's outer cylindrical surface as recited in claims 34 and 49.

Information on How to Contact USPTO

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached on (571) 272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dang D Le/
Primary Examiner, Art Unit 2834

1/17/10